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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/626,363	HOANG ET AL.	
	Examiner	Art Unit	
	Shi K. Li	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-13 and 15-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-13 and 15-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/29/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9 and 29 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "a centralized network management server … to build and maintain the set of network topology databases" in lines 2-4 of the claim. However, Claim 9 depends on claim 1. Claim 1 recites the limitation "each of said plurality of access nodes building and maintaining a set of one or more network topology databases" in lines 4-5. It is unclear whether the centralized network management server or each of the access nodes builds and maintains the set of network topology databases.

Claim 29 recites the limitation "a centralized network management server communicatively coupled to said access node to build and maintain the database" in lines 2-3 of the claim. However, Claim 29 depends on claim 25. Claim 25 recites the limitation "wherein the access nodes builds and maintains the available paths of the database" in lines 4-5. It is unclear whether the centralized network management server or the access node builds and maintains the database.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-5, 10-11, 16-19, 21-22, 24-26, 28 and 30 are rejected under 35 U.S.C. 102(a) as being anticipated by Ho et al. (P. Ho et al., "A Novel Distributed Control Protocol in Dynamic Wavelength-Routed Optical Networks", IEEE Communications Magazine, November 2002).

Regarding claims 1 and 10, Ho et al. teaches dynamic wavelength routing in optical network. Ho et al. teaches in FIG. la a network with a plurality of nodes. Ho et al. teaches on page 39, right col. partially adaptive routing wherein each source node is provided with a routing table (equivalent to network topology database of instant claim), in which paths to all its destinations are stored. When a connection request arrives, the source node selects a path from all the available ones from a routing table. Ho et al. teaches on page 38, right col., last paragraph wavelength continuity constraint for each lightpath.

Regarding claims 2-3, Ho et al. teaches on page 38, right col., last paragraph lightpath.

Regarding claim 4, Ho et al. teaches on page 38, right col., last paragraph wavelength continuity constraint for each lightpath, that is, the lightpath is conversion free.

Regarding claims 5 and 11, Ho et al. teaches dynamic path selection.

Regarding claim 16, Ho et al. teaches on page 39, left col., last paragraph that routing table contains prescheduled paths for each source-destination pair where source denotes the local access node. Topology databases of two access nodes are different because they contain paths with different source nodes.

Regarding claims 17-18, Ho et al. teaches on page 38, right col., last paragraph lightpath.

Regarding claim 19, Ho et al. teaches dynamic path selection.

Regarding claim 21, Ho et al. teaches on page 39, right col., second paragraph methods for managing the link state.

Regarding claim 22, Ho et al. teaches on page 39, right col., second paragraph methods for updating the routing table.

Regarding claim 24, Ho et al. teaches in FIG. 3 that the database includes the status of each wavelength.

Regarding claim 25, Ho et al. teaches on page 39, right col., second paragraph that each node maintains link status.

Regarding claim 26, Ho et al. teaches dynamic path selection.

Regarding claim 28, Ho et al. teaches on page 39, right col., second paragraph methods for updating the routing table.

Regarding claim 30, Ho et al. teaches on page 39, right col., second paragraph that each node maintains link status.

5. Claims 1-5, 9-11 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Blouin et al. (U.S. Patent 7,249,169 B2).

Regarding claims 1 and 10, Blouin et al. discloses in FIG. 2 a WDM network comprising a plurality of edge nodes. Blouin et al. teaches in col. 9, lines 1-30 that each edge node has a routing table. Blouin et al. teaches in col. 10, line 50-62 that upon receiving a request for connection, the edge node selects a route from the routing table. Blouin et al. teaches in col. 8, lines 62-67 that a route is a sequence of the traversed edge nodes. That is, the route of Blouin et al. is equivalent to path of instant claim.

Regarding claims 2-3, Blouin et al. teaches in col. 7, lines 5-7 light-path.

Regarding claim 4, Blouin et al. teaches in col. 7, lines 7-9 wavelength continuity property.

Regarding claims 5 and 11, Blouin et al. teaches in FIG. 5 and FIG. 6 establishing connection in real time.

Regarding claims 9 and 15, Blouin et al. teaches in FIG. 2 network controller 270.

6. Claim 25-26, 28-34, 36-40 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. (U.S. Patent 7,020,394 B2).

Regarding claims 25 and 31-33, Zhang et al. discloses in FIG. 1 a WDM network. Zhang et al. teaches in FIG. 9 that the network can be represented by a graph G=<V,E>. Zhang et al. teaches in col. 6, lines 35-42 using OSPF or IS-IS, which are known as link state routing where a link state database and forwarding database are built and maintain by each node. (OSPF is defined by RFC-1583 and IS-IS is defined by ISO/IEC 10589.)

Regarding claims 26 and 34, Zhang et al. teaches in col. 1, lines 63-64 assigning lightpath in real time based on connection requests.

Regarding claim 28, Zhang et al. teaches in col. 6, lines 35-42 update functions for maintaining link state database and network topology.

Regarding claim 29, Zhang et al. teaches in col. 6, lines 37-42 that the building and maintaining of the database can be done in a centralized manner or distributed manner.

Regarding claim 30, OSPF or IS-IS includes link management protocol for populated link state information.

Regarding claim 36, Zhang et al. teaches in col. 4, line 49-col. 5, line 15 determining whether a wavelength is available or not. This implies that the nodes keep track of whether a wavelength is unallocated (available) or allocated (unavailable).

Regarding claims 37-40 and 42, Zhang et al. teaches in col. 6, lines 43-54 computer usable medium.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 6-7, 12-13, 20 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al. (P. Ho et al., "A Novel Distributed Control Protocol in Dynamic Wavelength-Routed Optical Networks", IEEE Communications Magazine, November 2002) in view of Golmie et al. (N. Golmie et al., "A Differentiated Optical Services Model for WDM Networks", IEEE Communications Magazine, February 2000).

Ho et al. has been discussed above in regard to claims 1-5, 8, 10-11, 14, 16-19, 21-22, 24-25, 26, 28 and 30. The difference between Ho et al. and the claimed invention is that Ho et al. does not teach dividing optical network into QoS levels. Golmie et al. teaches in FIG. 3 and Table 1 to divide optical links into channels according to a plurality of service levels. One of ordinary skill in the art would have been motivated to combine the teaching of Golmie et al. with the WDM network of Ho et al. because different service levels fulfill different customer needs. For example, certain customers are willing to pay premier charge for high quality service. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to divide the network into a plurality of service levels, as taught by Golmie et al., in the WDM network of Ho et al. because different service levels fulfill different customer needs.

9. Claims 6-7 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blouin et al. (U.S. Patent 7,249,169 B2) in view of Golmie et al. (N. Golmie et al., "A

Differentiated Optical Services Model for WDM Networks", IEEE Communications Magazine, February 2000).

Blouin et al. has been discussed above in regard to claims 1-5, 9-11 and 15. The difference between Blouin et al. and the claimed invention is that Blouin et al. does not teach dividing optical network into QoS levels. Golmie et al. teaches in FIG. 3 and Table 1 to divide optical links into channels according to a plurality of service levels. One of ordinary skill in the art would have been motivated to combine the teaching of Golmie et al. with the WDM network of Blouin et al. because different service levels fulfill different customer needs. For example, certain customers are willing to pay premier charge for high quality service. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to divide the network into a plurality of service levels, as taught by Golmie et al., in the WDM network of Blouin et al. because different service levels fulfill different customer needs.

10. Claims 9, 15, 23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al. (P. Ho et al., "A Novel Distributed Control Protocol in Dynamic Wavelength-Routed Optical Networks", IEEE Communications Magazine, November 2002) in view of Pulkkinen et al. (U.S. Patent Application Pub. 2003/0172356 A1).

Ho et al. has been discussed above in regard to claims 1-5, 8, 10-11, 14, 16-19, 21-22, 24-25, 26, 28 and 30. The difference between Ho et al. and the claimed invention is that Ho et al. does not teach a centralized management system. However, centralized management of distributed database is well known in the art. For example, Pulkkinen et al. teaches centralized management of a distributed database (see paragraph [0012]. One of ordinary skill in the art would have been motivated to combine the teaching of Pulkkinen et al. with the WDM network

of Ho et al. because centralized management coordinates the local databases to ensure their consistency and provides powerful computation power that is shared among local databases. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a centralized management system for maintaining local database of each node, as taught by Pulkkinen et al., in the WDM network of Ho et al. because centralized management coordinates the local databases to ensure their consistency and provides powerful computation power that is shared among local databases.

11. Claims 16-19 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blouin et al. (U.S. Patent 7,249,169 B2) in view of Graves et al. (U.S. Patent 6,741,572 B1).

Blouin et al. has been discussed above in regard to claims 1-5, 9-11 and 15. Blouin et al. teaches in col. 7, lines 1-5 wavelength division multiplexing. Inherently, a wavelength must be assigned to a path for carrying optical signal for a particular channel. Nevertheless, Examiner cites Graves et al. for providing further evidence that assigning wavelength to links in a WDM network is well known in the art. Graves et al. teaches in FIG. 6A and FIG. 6B assigning available wavelength to links to form a lightpath. One of ordinary skill in the art would have been motivated to combine the teaching of Graves et al. with the WDM network of Blouin et al. because in a WDM network, wavelength must be chosen such that different channels would use different wavelengths. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to select a single wavelength an assign to a route to form a lightpath, as taught by Graves et al., in the WDM network of Blouin et al. because in a WDM network, wavelength must be chosen such that different channels would use different wavelengths.

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blouin et al. and Graves et al. as applied to claims 16-19 and 21-24 above, and further in view of Golmie et al. (N. Golmie et al., "A Differentiated Optical Services Model for WDM Networks", IEEE Communications Magazine, February 2000).

Blouin et al. and Graves et al. have been discussed above in regard to claims 1-5, 9-11 and 15. The difference between Blouin et al. and Graves et al. and the claimed invention is that Blouin et al. and Graves et al. do not teach dividing optical network into QoS levels. Golmie et al. teaches in FIG. 3 and Table 1 to divide optical links into channels according to a plurality of service levels. One of ordinary skill in the art would have been motivated to combine the teaching of Golmie et al. with the modified WDM network of Blouin et al. and Graves et al. because different service levels fulfill different customer needs. For example, certain customers are willing to pay premier charge for high quality service. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to divide the network into a plurality of service levels, as taught by Golmie et al., in the modified WDM network of Blouin et al. and Graves et al. because different service levels fulfill different customer needs.

13. Claims 27, 35 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (U.S. Patent 7,020,394 B2) in view of Golmie et al. (N. Golmie et al., "A Differentiated Optical Services Model for WDM Networks", IEEE Communications Magazine, February 2000).

Zhang et al. has been discussed above in regard to claims 25-26, 28-34, 36-40 and 42. The difference between Zhang et al. and the claimed invention is that Zhang et al. does not teach dividing optical network into QoS levels. Golmie et al. teaches in FIG. 3 and Table 1 to divide

optical links into channels according to a plurality of service levels. One of ordinary skill in the art would have been motivated to combine the teaching of Golmie et al. with the WDM network of Zhang et al. because different service levels fulfill different customer needs. For example, certain customers are willing to pay premier charge for high quality service. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to divide the network into a plurality of service levels, as taught by Golmie et al., in the WDM network of Zhang et al. because different service levels fulfill different customer needs.

14. Claims 31-34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al. (P. Ho et al., "A Novel Distributed Control Protocol in Dynamic Wavelength-Routed Optical Networks", IEEE Communications Magazine, November 2002) in view of Sichani et al. (A. Sichani et al., "A Novel Distributed Progressive Reservation Protocol for WDM All-Optical Networks", IEEE International Conferences on Communication, ICC '03, 11-14 May 2003).

Ho et al. has been discussed above in regard to claims 1-5, 8, 10-11, 14, 16-19, 21-22, 24-25, 26, 28 and 30. Regarding claim 31, the difference between Ho et al. and the claimed invention is that it may not be clear from Ho et al. how the source node communicates with other access nodes on the selected path to setup the path. Sichani et al. teaches in FIG. 1 backward reservation protocol. One of ordinary skill in the art would have been motivated to combine the teaching of Sichani et al. with the WDM network of Ho et al. because the backward reservation protocol reduces unused bandwidth. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a backward reservation protocol for setup the lightpath, as taught by Sichani et al., in the WDM network of Ho et al. because the backward reservation protocol reduces unused bandwidth.

Regarding claims 32-33, Ho et al. teaches on page 38, right col., last paragraph lightpath. Regarding claim 34, Ho et al. teaches dynamic path selection.

Regarding claim 36, Ho et al. teaches in FIG. 3 that the database includes the status of each wavelength.

15. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al. and Sichani et al. as applied to claims 31-34 and 36 above, and further in view of Golmie et al. (N. Golmie et al., "A Differentiated Optical Services Model for WDM Networks", IEEE Communications Magazine, February 2000).

Ho et al. and Sichani et al. have been discussed above in regard to claims 31-34 and 36. The difference between Ho et al. and Sichani et al. and the claimed invention is that Ho et al. and Sichani et al. do not teach dividing optical network into QoS levels. Golmie et al. teaches in FIG. 3 and Table 1 to divide optical links into channels according to a plurality of service levels. One of ordinary skill in the art would have been motivated to combine the teaching of Golmie et al. with the WDM network of Ho et al. and Sichani et al. because different service levels fulfill different customer needs. For example, certain customers are willing to pay premier charge for high quality service. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to divide the network into a plurality of service levels, as taught by Golmie et al., in the WDM network of Ho et al. and Sichani et al. because different service levels fulfill different customer needs.

16. Claims 37-40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al. and Sichani et al. as applied to claims 31-34 and 36 above, and further in view of Freeman

("Telecommunication System Engineering" by R. Freeman, John Wiley & Sons, 1980, pp 99-103).

Ho et al. and Sichani et al. have been discussed above in regard to claims 31-34 and 36. The difference between Ho et al. and Sichani et al. and the claimed invention is that Ho et al. and Sichani et al. do not teach a machine-readable medium. Freeman teaches in Section 12 stored-program control (SPC). Freeman teaches in p. 100 to store method steps as program in memory for providing instructions to a controller or computer. One of ordinary skill in the art would have been motivated to combine the teaching of Freeman with the modified WDM network of Ho et al. and Sichani et al. because SPC is flexible and expandable such that it is easy to upgrade the system by rewriting the program. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use SPC and store program in machine-readable medium, as taught by Freeman, in the modified WDM network of Ho et al. and Sichani et al. because SPC is flexible and expandable such that it is easy to upgrade the system by rewriting the program.

17. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al., Sichani et al. and Freeman as applied to claims 37-40 and 42 above, and further in view of Golmie et al. (N. Golmie et al., "A Differentiated Optical Services Model for WDM Networks", IEEE Communications Magazine, February 2000).

Ho et al., Sichani et al. and Freeman have been discussed above in regard to claims 31-34 and 36. The difference between Ho et al., Sichani et al. and Freeman and the claimed invention is that Ho et al., Sichani et al. and Freeman do not teach dividing optical network into QoS levels. Golmie et al. teaches in FIG. 3 and Table 1 to divide optical links into channels according to a

plurality of service levels. One of ordinary skill in the art would have been motivated to combine the teaching of Golmie et al. with the WDM network of Ho et al., Sichani et al. and Freeman because different service levels fulfill different customer needs. For example, certain customers are willing to pay premier charge for high quality service. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to divide the network into a plurality of service levels, as taught by Golmie et al., in the WDM network of Ho et al., Sichani et al. and Freeman because different service levels fulfill different customer needs.

Response to Arguments

18. Applicant's arguments filed 29 February 2008 have been fully considered but they are not persuasive.

The Applicant argues that Ho teaches that the paths of the routing table are defined offline and concludes, "Thus, Ho does not teach or suggest that the optical nodes build or maintain a representation of the paths for the routing tables." The Examiner disagrees. Even though the routing table is defined offline, it must be downloaded or entered into the node and organized by the processor within the node.

The Applicant argues "Blouin discloses a mixed network of edge nodes communicating with other edge nodes across a core optical network formed by a set of core nodes (Blouin, Figure 2, col. 6, lilies 15-34). Each of the edge nodes is an electronic packet switch or router with optical interfaces (Blouin, id.). The edge nodes communicate with other edge node across the optical network using pre-defined route-sets (Blouin, Figure 4, col. 9, lines 31-36). The route-sets are used for electrical routing, because the route-sets comprise only routes between the edges nodes and do not include optical routes between the core nodes (Blouin, Figure 3; col. 8,

lines 45-50; col. 9, lines t9-25). .... In particular, because Blouin discloses an electrical route-set table, Blouin does not teach or suggest a database based on a set of one or more connectivity constraints." The Examiner disagrees. The Applicant's statement "The route-sets are used for electrical routing, because the route-sets comprise only routes between the edges nodes and do not include optical routes between the core nodes" is not consistent with the teaching of the reference. Blouin et al. in FIG. 2 a plurality of edge nodes that are connected via core nodes. Blouin et al. redraws FIG. 2 as FIG. 3 to show the logical connections between edge nodes. However, Blouin et al. clearly teaches in col. 8, lines 45-54 "FIG. 3 illustrates another view of the network of FIG. 2 but with edges nodes 210 shown as being connected to other edge nodes through adaptive edge-to-edge links 310. The capacity of edge-to-edge links 310 results from the allocation of channels requested by edge nodes and performed by the resource allocation function in the core nodes. For example, an edge-to-edge link 310-1 between edge node 210A and edge node 210C is provided by resource allocations through core node 220X and core node 220Y, shown earlier in FIG. 2." It is clear that an edge-to-edge link may be a concatenation of an edge-to-core link, a core-to-core link and a core-to-edge link. Furthermore, Blouin et al. teaches in col. 6, lines 63-67 that each physical link 231 and 232 may comprise a number of fiber links. A number of wavelengths may be carries by each fiber link, using wavelength division multiplexing technique. Blouin et al. then teaches in col. 7, line 8 the connectivity constraint "a light-path has the wavelength continuity property".

The Applicant argues " Zhang discloses using OSPF or IS-IS to build a large monolithic optical network topology databases. However, Zhang does not teach or suggest an optical network database that is specific to a given access node and is different from the optical network

topology databases on other access nodes." It is understood either OSPF and IS-IS calculates shortest path from the source node to the destination nodes and stores the information as forwarding database. By the nature that each access node considers itself as the source node, databases of different access nodes have different source nodes and therefore must be different from each other.

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shi K. Li whose telephone number is 571 272-3031. The examiner can normally be reached on Monday-Friday (7:30 a.m. - 4:30 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

skl
20 May 2008

/Shi K. Li/
Primary Examiner, Art Unit 2613